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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,766	01/26/2004	Matthew L. Severson	020417	1936
23696	7590	02/09/2005	EXAMINER	
Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714			LUU, AN T	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

**Office Action Summary**

Application No.

10/765,766

Applicant(s)

SEVERSON, MATTHEW L.

Examiner

An T. Luu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13 is/are allowed.
- 6) ☒ Claim(s) 14, 19, 20, 31 and 32 is/are rejected.
- 7) ☒ Claim(s) 15-18, 21-30 and 33-42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12-21-04</u> | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Drawings***

1. The drawings are objected to because all signals directly involve element 112 of figure 2 appears having nothing to do with rest of the circuit. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 14, 19-20, 31 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by the Kramer et al reference (U.S. Patent 6,667,638).

Kramer et al discloses in figure 1 an apparatus comprising an input clock signal (N4) having a predetermined frequency and having a rising edge and a falling edge associated with each clock cycle of the input clock signal(i.e., all clock signal having a falling edge and rising edge), and a control circuit 170 to generate an output clock signal N5 having a frequency of M cycles for every N cycles of the input clock signal (col. 5, lines 10-14) and to select a rising edge of the output clock signal based a rising edge or a falling edge of the input clock signal and to select a falling edge of the output clock signal based on a rising edge or a falling edge of the input clock signal as required by claim 14.

As to claim 19, the scope of claim is similar top that of claim 14. Therefore, it is rejected for the same reason set forth above.

As to claim 20, figure 1 shows the control circuit comprising a counter means 140 for generating a counter value (N count) based on the input clock signal and comparison means 150 for comparing the counter value to predetermined count value N6 and output control means 170 for generating the output clock signal with the rising edge of the output clock signal based on a rising edge or a falling edge of the input clock signal and a falling edge of the output clock signal based on a rising edge or a falling edge of the input clock signal based on the comparing by the comparison means.

As to claims 31 and 32, they are rejected for reciting a method/step derived from the apparatus of claims 19 and 20 that are rejected as noted above.

***Allowable Subject Matter***

4. Claims 1-13 are allowed.
5. Claims 15-18, 21- 30 and 33-42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is an examiner's statement of reasons for allowance: the prior art of record fails to disclose an apparatus and method thereof comprising elements being configured as recited in claims. Specifically, none of the prior art teaches or fairly suggests, among other things, the following limitations:
  - A control circuit to generate an output clock signal based on the comparator signals to thereby select a rising edge of the output clock signal based on a rising edge or a falling edge of the input clock signal and to select a falling edge of the output clock signal based on a rising edge or a falling edge of the input clock signal as required by claims 1, 15, 16, 26, 27, 38 and 39.
  - The control means generates the output clock signal with a rising edge of the output clock signal based on a rising edge of the input clock signal if the comparator signals indicate that the counter has a value greater than or equal to zero and less than  $M/2$  as required by claims 21 and 33.

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- The control means generates the output clock signal with a rising edge of the output clock signal based on a falling edge of the input clock signal if the comparator signals indicate that the counter has a value greater than or equal to zero and less than  $M/2$  as required by claims 22 and 34.
- The counter means comprises a  $M/N:D$  counter where  $D$  is related to duty cycle of the output clock signal as required by claims 23 and 35.
- A storage area as required by claims 17, 18, 28, 29, 40 and 41.
- A mode control means for overriding the control means wherein the control means always generates the output clock signal with a rising edge and a falling edge of the output clock signal based on a rising edge of the input clock signal as required by claims 30 and 42.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to An T. Luu whose telephone number is 571-272-1746. The examiner can normally be reached on 7:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

An T. Luu  
2-2-05 



TIMOTHY P. CALLAHAN  
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